



F. M. TENCH, in the photograph at left, heads the Rover Project, and leads a discussion here in one of the weekly meetings of the Rover Production Group.



At right, Charles Bowling readies the disc system for a Rover report run, while Dan L. Morgan and John M. Childress (center) look on. The magnetic disc equipment was obtained, and the Rover work was one of the first systems to go into operation on this new data processing equipment.

Safety Awards To Be In Soon

How did your tastes line up with other Y-12ers in safety award selections? Take a look at the results . . . a total of 616 employees chose the Corning ware set, the most popular item on the list!

Next in line came the electric ice crusher, as 500 Y-12ers selected that item as their safety award for 1967. Third came the pressure cooker with 495 takers. A total of 430 chose the electric drill . . . while 394 came up with the electric can opener.

Choosing the stainless steel flatware were 352 Y-12ers, as 310 chose the sleeping bag. The hair dryer was chosen by 290 folks, and 247 takers were listed for the electric mixer.

The electric toaster had 229 takers, and the small electric percolator had 183 takers. The carpet sweeper was chosen by 179 employees, and the transistor radio had 167 takers.

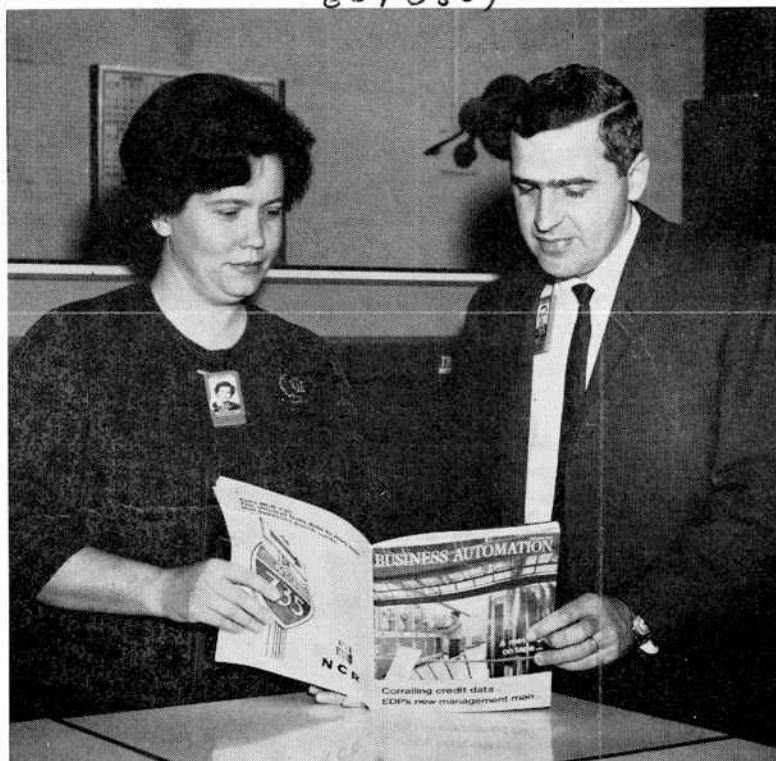
The remaining items were as follows: Thermal blanket, 139; bathroom scales, 132; fishing reel, 126; party percolator, 114; disposal can, 108; fishing rod, 101; tackle box, 88; boat seat, 76; and stainless steel cutlery set, 62.

Safety advises that the items have all been ordered, and it is expected that they will be arriving the first week in March. Distribution will be announced when the items have all been delivered.

Instrument Society Meet Set Wednesday, March 6

The Oak Ridge Section of the Instrument Society of America will meet next Wednesday, March 6. The meeting is set at the Holiday Inn, Oak Ridge, with a social hour at 6 p.m., and dinner at 6:45 p.m.

Gorden F. Stiles, Fisher Governor Company, will speak on "Notable Exceptions To The Basic Liquid Sizing Equation." Definitions of problem areas often encountered in sizing valves for liquid service and procedures by which these areas can be successfully circumvented.



LOIS SECRIST AND AL CHRISTMAN view the current issue of Business Automation, which contains an article by the Y-12er describing how Project Rover's production problems were computerized on a relatively small, limited 'memory' computer.

AWS Veep Guest At Meet March 12

American Welding Society Vice President G. E. Linnert will be the technical speaker at the Tuesday, March 12 meeting of the Northeast Tennessee section of AWS. The meeting will feature refreshments at 6:30 p.m. at the Alexander Motor Inn, Oak Ridge. A steak dinner will be served at 7:15 p.m.

Linnert, a supervisor of welding research at Armco Steel Corporation, Middletown, Ohio, will talk on "Welded Joints Examined for Failure Sources." He recently wrote a two-volume book on **Welding Metallurgy for Carbon and Alloy Steels**.

Dinner reservations may be made through C. R. Eichelberger, extension 3-5851, or at his Knoxville home, 588-8661.

DEAR CROSSING

Sign near school: "Be careful for children . . . especially if they are driving cars."

Harwell's Rae Is Guest At Physics Seminar

E. R. Rae, A.E.R.E., Harwell, will lead this week's Physics Division seminar. His subject will be "Nuclear Physics Research With the Harwell Electron Linear Accelerator."

The seminar is set for Friday, March 1, at 3:15 p.m. in the East Auditorium of ORNL's 4500 building.

Keeping Machinery In Repair Important

If it is your job to oil and repair machinery, you have the responsibility to see that necessary precautions are taken so that this equipment or your activity does not bring harm to anyone. Lock out equipment thoroughly, post working signs and rope off area as necessary when removing guards from machines, escalators, elevators or pieces of equipment to make repairs. Be sure no one gets hurt because of your failure to warn them properly.

Y-12er Writes Article On Rover Computer Work

The February issue of **BUSINESS AUTOMATION** is of special interest to Y-12ers.

Lois J. Secrist, Computing Applications Analyst, has written a detailed article describing Y-12's participation in the Rover Project. Since 1960, Y-12 has been active in the production of reactor core components for a nuclear powered rocket. Known as Project Rover, this Atomic Energy Commission-sponsored search for a more efficient power source for space vehicles is providing much basic technology in the nuclear propulsion field.

Following reactor core testing at an isolated desert site in Nevada, each core is disassembled for inspection in a test site building especially designed to handle the radioactively hot components. These tests indicate which problems have been solved, and usually point out new trouble areas to be wrestled with by the staff at each facility.

Y-12's process flow in its Rover facility is most responsive to what is learned from each test firing and other experiments, and changes may be incorporated right up to a fuel element's shipment date. Providing a comprehensive computer data system for an unpredictable process stream on a rigid time table is a challenge not lightly undertaken. But the Data Process Department did develop such a system for Rover in 1963.

Lois's article details the many problems encountered in the data

system. Rover was not new to the Data Processing personnel since they had been involved in production reports of the project prior to the production data system's design.

The article, entitled "Space Age Data System for a Limited Storage Computer," details how the system, usually reserved for larger computers, was programmed for the 1401 computer, which has limited "memory" storage.

One of the first problems pointed out was incomplete forms from the production areas, illegible handwriting and notes on ordinary paper. Keypunching this information was a major problem, until C. C. Dinkens, of the Rover Production Records Group, offered a completely redesigned records system, originating from his department. He produced a group of attractively designed forms which included all necessary card column designations and keypunching instructions. Amazingly enough, even the handwriting improved!

Magnetic disc equipment was obtained which required programming personnel to learn the Autocoder programming language. The Rover work was one of the first systems to go into operation on this new equipment.

The developmental nature of production facilities for Project Rover took programming personnel into some totally new areas. They had had some experience with developmental production data systems over the previous 10 years, but the larger systems had dealt with a more static production situation.

Requests for revisions and additional reports were received with increasing frequency. Results of test firings, experiments and studies led to last minute changes in production methods and wholesale revisions of the data systems. Temporary revisions were usually completed in a few days, and, of course, were not as satisfactory as the direct revision to the system itself would have been. Only the capability of the senior operation clerk made possible the degree of

Continued on Page 4

SAFETY SCOREBOARD

**The Y-12 Plant Has
Operated
60 Days Or
1,740,000 Man-Hours
(Unofficial Estimate)
Through February 25
Without a Disabling
Injury
Safety At Home
At Work, At Play**

The Bulletin

Published Weekly For The
Y-12 Employees Of
UNION CARBIDE
CORPORATION



NUCLEAR DIVISION

JAMES A. YOUNG Editor

Member Appalachian
Industrial
Editor's
Association

American Association Industrial Editors

OFFICE

Post Office Box Y
Oak Ridge, Tenn. 37830
Telephone 3-7100

Guard C. Bryant Collapses, Dies

The Guard Department was shocked Wednesday, February 21, in the death of Carl M. "Shorty" Bryant. The well-known Y-12er died of an apparent heart attack. "Shorty" as he was affectionally known throughout the plant



was an avid bowler, and had already registered to participate in this week-end's tournament. The Y-12er was born in Westbourne, Tennessee (in

C. M. Bryant Campbell County). He was a veteran of the U. S. Army, and came to Y-12 for the second time November 16, 1950. He served here also from 1944 until 1947. Meanwhile he had been employed by Roane Anderson Company and J. A. Jones.

Mr. Bryant is survived by his wife Wilma Simmons Bryant, three children Teresa Diane, Daryl Justin, and Patrick Carl Bryant, all at home at 112 Briar Road, Oak Ridge; another son Ronald Bryant, West Palm Beach, Florida; his mother Mrs. Fred Burns, Lansing, Tennessee; sisters, Mrs. Jack McKinney, Oak Ridge; and a brother Glen Bryant.

Funeral services were held Friday, February 23, at 1 p.m. at the First Cumberland Presbyterian Church, Oak Ridge, with the Reverend T. V. Warnick officiating. Interment followed in the Oak Ridge Memorial Park.

Deepest sympathy is extended the Bryant family.

Noted Baritone Concert Saturday

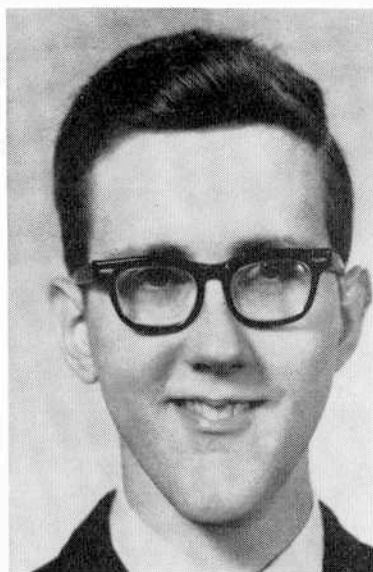
William Wolff, baritone, will be featured in concert Saturday, March 2, at the Oak Ridge High School Auditorium. Curtain time is 8:15 p.m.

Wolff, who is making his second Oak Ridge appearance, has soloed with some of the world's leading orchestras. He has sung with the New Orleans Opera Company, the Chataqua Operatic Company and the New York City Center Opera Company, as well as with the NBC-TV Opera Company.

His Oak Ridge concert will include arias and art songs by Handel, Mozart, Verdi, Purcell, Brahms, and Dello Joio, and folk songs from Israel.

The baritone will be accompanied by Oak Ridge's Malka Mevorach-Choset, who will renew a professional association of old standing with Wolff. The Oak Ridge Civic Musical Association season ticket-holders will not

Duncan Son Top Engineering Frosh Despite Handicap



Michael G. Duncan

Michael G. Duncan, son of Mr. and Mrs. Mikey J. Duncan, 115 Duncan Street, Clinton, is the only freshman in the college of engineering at the University of Tennessee to make a 4.0 average on the dean's list with highest honors for the fall quarter.

This is quite an accomplishment for Michael, since he had to leave Clinton High School because of illness in 1964. He was taken to the Mayo Clinic, Rochester, Minnesota, where it was found he had a rare condition, an inability of the body to handle copper that is taken in with food and drink. After five weeks of tests and treatment, Michael returned to Clinton and continued part of his studies under a home-bound teacher. He returned to Clinton High School in the fall of 1965, and graduated in the top ten of his class last year. While attending Clinton, Michael was a member of the National Honor Society, French Club, Science Club and the Band. He won awards in Algebra II, Physics, Advanced Math and for a science project. In his junior year, he won an award for making all A's. He was chosen as one of his senior superlatives, for the most artistic student of 1967.

Michael has to return to Mayo each summer for a checkup. He continues to make improvement.

Michael's proud father is in Y-12's Tooling Coordination, Process Maintenance Department.



Will join car pool from vicinity of Delaware and Florida Avenues, Oak Ridge, to Bear Creek Portal, straight day. J. F. Manne-schmidt, plant phone 3-6234, home phone Oak Ridge 483-1563.

Elam, Fisher Move Offices To Fire Hall

Security and Fire Protection Engineering Head W. O. Elam has returned to Building 9710-2.

Also moving to the Fire Hall was A. J. Fisher, Security.

All telephone numbers remain the same . . . but the address has changed.

have to purchase tickets, and non-members may purchase tickets at the box office prior to the concert.

Aylor, Chamberlain, Fox, Jameson, Kilpatrick, Murphy And Smith End Y-12 Careers Tomorrow

The end of February sees seven Y-12ers make their exodus . . . as five retire and two elect early retirement. Justin N. Aylor, Dispatching; Clarcy C. Chamberlain, General Machine Shop; James C. Fox, Casting Department; Dexter C. Jameson, Mail Department; Fred J. Kilpatrick, Buildings, Grounds and Maintenance Shops; Sanders E. Murphy, Guard Department; and William F. Smith Sr., Chemical Services, all retire tomorrow. Chamberlain and Smith's retirements are early.

Justin N. Aylor, a native of Hebron, Kentucky, came to Y-12 July 5, 1961. He worked from 1923 until 1929 with the Formica Corporation, Cincinnati, and from then on as a radio serviceman, die maker and production engineer in the Cincinnati-Dayton area. He attended the Ohio Mechanical Institute and the University of Cincinnati.

Mrs. Aylor is the former Frances Graf, and the couple has two children . . . Gerald Lee Aylor, Orlando, Florida; and Nancy A. Honkomp, Cincinnati. There are eight grand-children.

Aylor plans to develop his hobby . . . interior decorating . . . into a profitable pastime, starting with his own home, 518 Vista Drive, Clinton. He says he wants to keep busy.

Clarcy C. Chamberlain, a native of Claiborne County, came here February 4, 1944. He worked in the C. B. Adkins Furniture Company, Knoxville, from 1923 until 1938. He also worked with the Atlumore Furniture Company, and worked briefly with the Bethlehem Fairfield Shipyards, Baltimore, and Rohm & Haas before coming to Y-12. The Chamberlains live at Route 2, Beaver Creek Drive, Knoxville. Mrs. Chamberlain is the former Lorraine C. Parker.

The retiree has a step-son Thomas Parker and a step-daughter Victoria Parker, both of Knoxville.

He plans to do a lot of fishing and hunting and some gardening around his home.

Fox Born In Newport

James C. Fox, born in Newport, Tennessee, came here March 1, 1944. He spent his early years with the Knoxville Glove Company, from 1922 until 1927 . . . until 1932 with Fulton Sylphon Company. He farmed during the thirties, and worked with the Tennessee Valley Authority before coming to Oak Ridge.

The Foxes live at 100 Decatur Road, Oak Ridge.

Mrs. Fox is the former Georgia Smith, and the couple has two sons James A., Knoxville, and Thurman L., Clarksville, Tennessee. They also have seven grand-children.

The retiring Fox says he plans to retire to his Oak Ridge home.

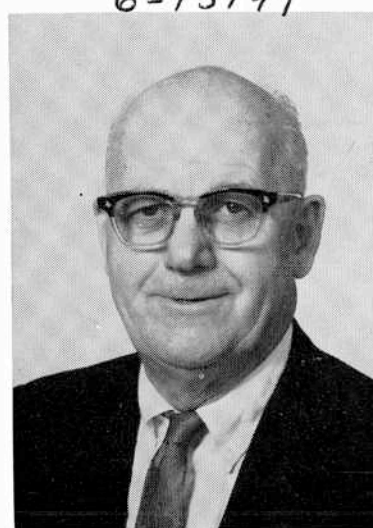
Dexter C. Jameson, Mail Department, was born in Guthrie, Kentucky. He came here January 11, 1952 . . . after self employment in the contracting business in Pembroke, Kentucky; the M. T. Reed Construction Company (Camp Campbell), J. A. Johnson Construction Company, Roane Anderson, Fletcher Moore Construction Company, J. A. Jones and the Ridge Wood Working and Maxon Construction Company.

A Teacher Family

Mrs. Jameson is the former Eva Oliver and the couple has two sons Dexter a professor at the University of Tennessee, Robert, a teacher at Clinton; daughters, Evelyn Jefferies, Murphy, North Carolina; Elizabeth Jameson, Alexander, Virginia; and Gladys, a teacher at Oak Ridge.

Jameson says he has no immediate plans . . . other than remaining in Oak Ridge. He says he has many odds and ends to do around the house.

The Jamesons also boast of seven grandchildren.



Justin N. Aylor

6-13797



Clarcy C. Chamberlain

6-13795



James C. Fox

6-13799



Dexter C. Jameson

6-13805



Fred J. Kilpatrick



Sanders E. Murphy

6-13800

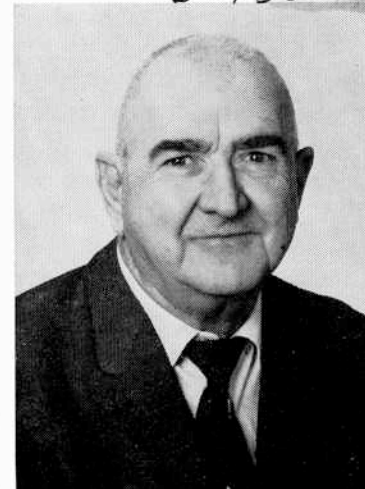
Fred J. Kilpatrick, a native of Fletcher, North Carolina, came to Y-12 January 16, 1951. Prior to that he worked with building contractors in Asheville. He served in the U. S. Navy from 1922-1924. He worked with the American Bemberg, Company, Elizabethton, and from 1947 until 1949 did carpentry work around Johnson City. He worked with the Holston Ordinance Works, and the Rock Wool Insulating Company, immediately prior to coming here.

Kilpatrick lives at Route 17, Knoxville.

He has no immediate plans other than just taking it easy.

Murphy From Sevier

Sanders E. Murphy, a long time guard, is a native of Sevier



William F. Smith Sr.

Continued on Page 4



THE CELLAR-DWELLERS RECENTLY COPPED city honors in the Junior ABC bowling tournament in Knoxville. The same team took top honors in the state last year . . . and will bowl in statewide competition again at Clarksville in April. From left, are C. C. Roberts Jr. (son of C. C., Security), Andy Caughron, Steve Clabough, Wayne Norman and Steve Ritter.

Y-12's Busy Beavers Again Take First Half In Volleyball League, Losing One Game

The Y-12 Beavers finished the first half of the Volleyball League nine games out in front of their two nearest opponents.

The Beavers finished the first leg of league action last week by downing the Mountaineers 15-3, 15-2, 15-2 and 15-7. Other action on Court B saw the K-25 Hawks best the Neophytes 15-4, 15-3, 15-4 and 15-3. The Naughts nixed the Charley Browns 15-7, 15-8, 15-8, and 15-12.

On Court A the Mix-Ups defeated the K-25 Gashouse Gang 15-11, 18-16 and 15-12. The Gang took game three 15-10. The Dirty Half-Dozen downed the Ecobums 15-7, 15-7 and 15-9. The Bums won game two 15-10. The Set-Ups sank the Old Men for two games 15-10, 15-7 . . . the Men returned to take games three and four

Team	W	L
Beavers, Y-12	43	1
Set-Ups, ORNL	34	10
Dirty Half Dozen, K-25	34	10
Ecobums, ORNL	33	11
Old Men, ORNL	33	11
K-25 Hawks	25	19
Naughts, ORNL	18	26
Mountaineers, Y-12	13	31
K-25 Mix-Ups	10	34
Neophytes, Y-12	9	35
Charley Browns, ORNL	7	37
K-25 Gashouse Gang	5	39

Recreation



Saturday, March 2

Y-12 BOWLING TOURNAMENT: Mixed Doubles, Team Events, Ark Lanes.

Sunday, March 3

Y-12 BOWLING TOURNAMENT: Doubles and Singles, Ark Lanes.

SKEET TOURNAMENT: 1 p.m. Oak Ridge Sportsman's Association range.

Monday, March 4

BASKETBALL: Beginning 6:30 p.m. Oak Ridge High School Gym. Bat Boys vs. TK's; Sharp Shots vs. Combustion; Atoms vs. Bombers.

TABLE TENNIS: 7 p.m. Oak Ridge Wildcat's Den.

BOWLING: C League, 5:45 p.m., Ark Lanes.

PHYSICAL FITNESS: (For Women) 7:30 p.m. Oak Ridge High School Girls' Gym.

Tuesday, March 5

PHYSICAL FITNESS: (For Men) 7:30 p.m. Oak Ridge High School Gym.

Wednesday, March 6

BASKETBALL: Beginning 6:30 p.m. Oak Ridge High School Gym. Chargers vs. K-25 Falcons; Radioisotopes vs. Eagles; Combustion vs. Health Physics.

BOWLING: Mixed League, 8 p.m. Ark Lanes.

Thursday, March 7

BOWLING: 5:45 p.m. Classic League, Ark Lanes.

BADMINTON: Informal Play, employees and spouses, 7:30 p.m. Jefferson Junior High School Gym.

VOLLEYBALL: Beginning 6:30 p.m. Oak Ridge High School Gym. Court A: Beavers vs. Naughts; Mountaineers vs. Ecobums; Old Men vs. Charley Browns. Court B: Dirty Half-Dozen vs. K-25 Gashouse Gang; Neophytes vs. Mix Ups; K-25 Hawks vs. Set Ups.

Pair Of Jims Make Basketball Odds

Basketball men got 10 games in for the cause last week, as action in the second-half reached a brisk pace.

First off, Monday, Y-12's Atoms, playing with only four men gave Combustion a work-out. Combustion won, naturally, 52 to 20 . . . as Bobby Belt belted 21 big points through for the winning combo. Curtis McGinnis scored a lucky 13.

Health Physics kept up their unblemished record, as they KOed the TK's 66 to 44. Big Jim Carter again led the troops, this time with 24. Richard Hudson led the losers with 19 . . . as Tony Thomas scored 13.

The Chargers, from Y-12, defeated the Bat Boys in final action Monday, as Ray Leffler left 16 on the boards for the winning team. Hugh Beeson scored an even dozen for the losers.

Tuesday began as the TK's took charge of the Chargers 59 to 53 in a close one all the way. Doug Raymer was too much for the Chargers, scoring 27 points . . . aided by Tony Thomas and Richard Hudson, 10 each. Ray Leffler led the losers again, this time with 21.

The Bombers sank the Sharp Shots 49 to 23, as Jim Shoemaker wracked up 14 points for the big Bombers.

Health Physics Again!

Health Physics again won Tuesday, this time 54 to 23 past the Radioisotopes. Jim Treadwell took 19 points, Bob Compton, 10.

Radioisotopes racked a win up Wednesday night at the expense of the Sharp Shots . . . 39 to 29. The Shots refused to lie down . . . but fell behind in the first two quarters, and couldn't match big Dave Smily who controlled the boards and rammed 15 big points through. John Gilbert had hot hands for the Shots.

The Bombers belted the Eagles 65 to 53 in Wednesday's second big game. The Bombers played good control ball, giving the Eagles very few extra shots. Herm Thomas and Jim Shoemaker powered the Bombers to victory with 13 and 14 points. Red East and Larry McDonald were hot from outside but the Eagles sorely missed Bill Kirksey who was injured earlier in the season.

A Pair of Jims

Health Physics took their third victory of the week from the K-25 Falcons, 63 to 40. Churchill Moore led the light brigade charged but it fell far short. The HP boys were just too big, too fast for the Falcons. A pair of Jims (Treadwell and Carter) beats a single Churchill any day . . . says the scorekeeper.

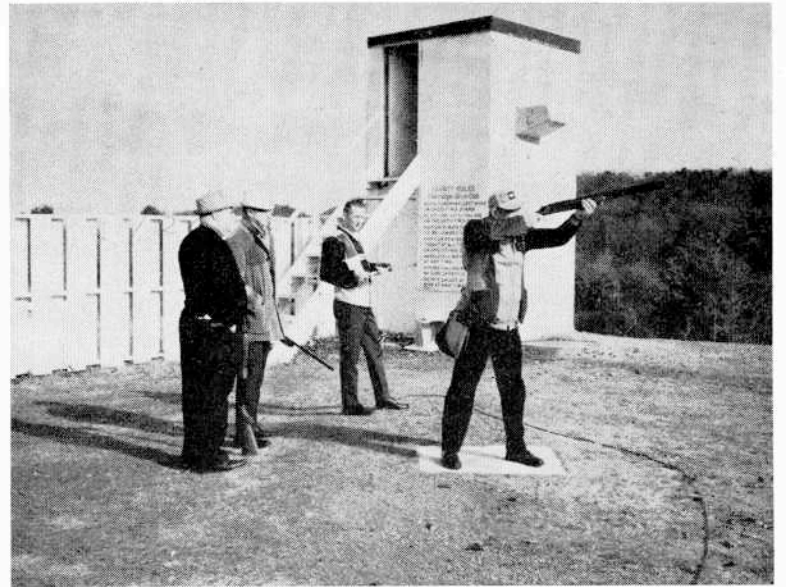
Final play came in the full week as the Atoms broke the Bat Boys 38 to 36. This game stayed close all the way, with two points separating the teams most of the way. The lead changed hands several times. In the overtime action Jim Meiche put Bat Boys ahead but Harris and Batch hit two buckets to clinch the game.

League standings follow:

Team	W	L
Health Physics, ORNL	5	0
Bombers, ORNL	4	0
TK's, ORNL	3	2
Chargers, Y-12	3	2
Atoms, Y-12	3	2
Eagles, Y-12	2	2
Radioisotopes	2	2
K-25 Falcons	1	3
Combustion, ORNL	1	3
Sharp Shots, ORNL	1	4
Bat Boys, Y-12	0	5

GREATEST HAPPINESS . . .

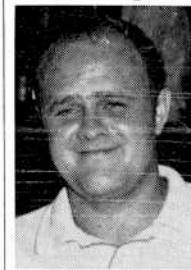
'The greatest happiness in life is the conviction that we are loved, loved for ourselves, or rather loved in spite of ourselves.' Victor Hugo.



TOMMY WEBBER ZEROES IN ON A SKEET at a recent Skeet Tournament, where Carbide marksmen compete among each other. The firing is so arranged that newcomers can shoot on par with the old vets, as firing is on a handicap basis . . . then veterans are penalized when they win, and cannot win in the next firing. Newcomers are always welcome at the once-a-month tournament.

Big Leaders Take Wins In C Race

Standings remained static in the C Bowling League last week, as both teams on top took four point wins. The Sunflowers sailed past the Invalids, and the Parbustlers pasted one on the Badgers. Other big wins went to the HiLifers over the Royal Flush, and the Big Five by the Fireballs.



Bill Sise, Big Five, hit new season highs in singles . . . a 251 scratch, 270 handicap game! His 587 scratch series was high also.

Kendall Brooks, Parbustlers, was high on handicap series with 668.

The Big Five bested the field in singles . . . 948 scratch, 1055 handicap. The Sunflowers had high series in scratch with 2626, while the Parbustlers hit new highs with 3099 in handicap series.

League standings follow:

Team	W	L
Sunflowers	21	7
Parbustlers	20	8
Rounders	18	10
Badgers	16	12
HiLifers	16	12
Big Five	13	15
Rodders	11	17
King Pins	11	17
Royal Flush	11	17
Invalids	11	17
Fireballs	10	18
Rollmasters	10	18

Bowling Interest Up As Entries Increase

Interest in bowling must be picking up, as gains are shown for registration in this week end's tournament. The big even is set Saturday and Sunday, March 2 and 3.

A total of 25 men's teams will participate in the big show Saturday and Sunday . . . with 54 men's doubles (108 singles) . . . and 99 men registered for all events' competition.

There will be 19 mixed doubles rolling, a total of eight women's doubles, 16 singles . . . with 16 women signed for all events' competition.

The Recreation Department advises bowlers to get there at least 30 minutes before your set time.

Asmanes Takes February Skeeters

February Skeet Firings saw Charlie Asmanes win top spot with a fiery 48.859 handicap score. He was followed by Fred Welfare, ORNL, 48.624; and D. Fry, also from ORNL, 47.929.

Tommy Webber, B. Powers, R. Allstun, F. Patton and L. Bray all fired under penalty.

A goodly number of 21 skeeters showed up for the show . . . which always makes it more interesting.

The next firing is Sunday, March 3, at 1 p.m. at the Oak Ridge Sportsman's Association Range . . . so come on out.

February Skeet Results:

Firer	H*Cap Score
R. A. Allstun, Y-12	48.337*
K. Bahler, Y-12	47.684
R. McNabb, Y-12	47.280
H. Bertini, ORNL	46.960
C. Theabold, K-25	45.040
J. Case, Y-12	46.883
D. Fry, ORNL	47.929
H. Brewett, Y-12	47.175
C. Asmanes, Y-12	48.859
T. Webber, Y-12	49.731*
W. Brundage, ORNL	47.625
F. Welfare, ORNL	48.623
B. Powers, Y-12	48.708*
C. Brewster, Y-12	46.464
F. S. Patton, Y-12	48.645*
M. Bender, ORNL	47.120
W. H. Davy, K-25	46.036
L. Bray, Y-12	49.525*
L. Jones, K-25	46.160
J. Bell, ORNL	46.160
E. Stumpf, Y-12	46.480

*Under Penalty

Roses 'N Thorns Climb Mixed Alley

The Roses 'N Thorns moved up to tie with the Hits & Misses for the lead in the Mixed Bowling League. The R 'T Crowd took four points at the expense of the Alley Cats. The Hits & Misses hit the Rollers for three. The McSprays twisted four points away from the Twisters . . . and the Goofers and Mustangs shared two each.

Gwen McLaughlin, McSprays, hit a 178 scratch, 215 handicap single. Her teammate Ethel Spray rolled a 461 scratch series and Nancy Garrison, Hits & Misses, hit a 598 handicap series.

C. R. Lively, Rollers, rolled a 201 scratch, 224 handicap single. His 503 scratch series was high. Larry McLaughlin, McSprays, rolled a 602 handicap series. The McSprays rolled a 678, 828 handicap single . . . and series of 1869 scratch. The Hits & Misses zeroed in with a 2322 handicap series.

Team	W	L
Roses 'N Thorns	22	14
Hits & Misses	22	14
Mustangs	20	16
Rollers	20	16
Goofers	17	19
McSprays	19	17
Twisters	15	21
Alley Cats	9	27

Y Table Tennis Lead Threatened

Top-gun in the X Table Tennis League last week lengthened his lead by taking on Roy Huddleston and defeating him for three full games. Herve Derrien downed Herb Mook for two in the only other action seen.

X League standings:

Player	W	L
Geoffrey Newman	31	2
Loyd Wyatt	18	12
Herve Derrien	17	16
Roy Huddleston	16	17
Herb Mook	16	17
Bill Motley	13	17
Bill Foutz	8	19
Jerry Keyes	4	23

Action picked up in the Y League as Ed Gambill moved up defeating Art Weinberger for three and Fred Wetzel for two. Rokuro Oyamada defeated Bob Coveyou for two games . . . while Al Norris knocked out Francois Kertesz for three. Wetzel took two from Gordon Brewer. Paul Kasten picked up three easy ones from Bob Brown via forfeit.

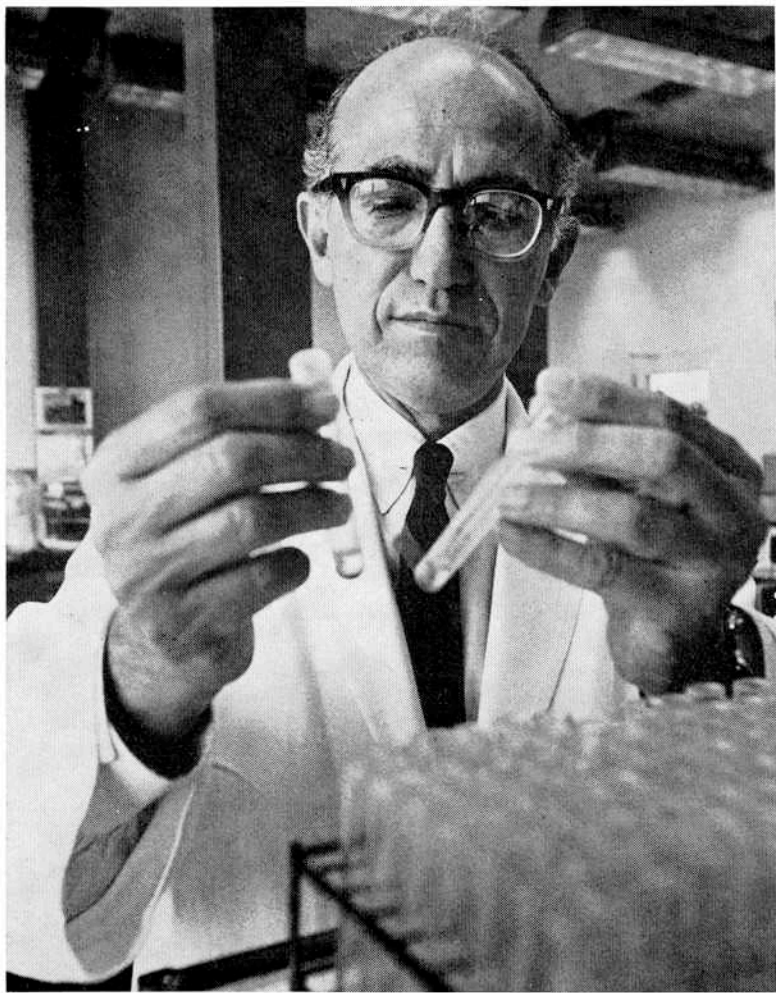
Y League standings:

Player	W	L
Gordon Brewer	25	8
Bob Coveyou	22	8
Ed Gambill	25	11
Paul Kasten	22	11
Al Norris	21	12
Fred Wetzel	11	9
Art Weinberger	9	16
Rokuro Oyamada	9	18
Francois Kertesz	7	23
Bob Brown	0	27

The only games played in the Z League saw Ken Toth defeat Joe Lewin the full game count.

Z League standings:

Player	W	L
Bill Smith	26	1
Ken Toth	9	3
Joe Lewin	18	9
Bill Hackett	12	9
A. B. Meservy	13	11
Dave Allen	6	15
Tudor Boyd	0	12
Winfred Collins	0	24



SCIENTIST-PHILOSOPHER DR. JONAS SALK, discoverer of the polio vaccine, is developing a new concept in research, which he terms "biophilosophy," that could unite science and humanism in the service of mankind. Dr. Salk will be interviewed at the new Salk Institute for Biological Studies in "The 21st Century" broadcast "Jonas Salk—Science of Life," Sunday, March 3 at 6 p.m., EST, in color over the CBS Television Network. The program is carried locally by WBIR-TV, Channel 10. CBS News Correspondent Walter Cronkite is principal reporter for the series which is sponsored in the public interest by Union Carbide Corporation.

'Dr. Jonas Salk—Science of Life' Subject For '21st Century' TV Program March 3

A prototype of the research institute of the future where science and humanism may be combined to help solve the problems of man will be visited in "The 21st Century" telecast "Jonas Salk—Science of Life," Sunday, March 3 at 6 p.m. The program over CBS Television Network is carried locally by WBIR-TV, Channel 10. CBS News Correspondent Walter Cronkite is principal reporter for the series, which is sponsored by Union Carbide Corporation.

In interviews with Dr. Jonas Salk, who in 1955 produced a vaccine to prevent polio, and other scientists at the Salk Institute for Biological Studies in La Jolla, California, "The 21st Century" team will explore philosophies that may foreshadow the research institutes of the twenty-first century. Key to the Salk Institute approach is biophilosophy, fusing of science and the humanities to not only attempt to solve basic scientific problems, but also to explore the cultural, social and economic implications of these achievements.

To bring scientific methods to the problems of both men and molecules, five senior scientists, in addition to Dr. Salk, are working at the Institute. They represent different cultures and scientific disciplines. However, their prime focus at this time is on molecular biology—the study of the molecules that make up life. Their range of research extends from the chemical origins of life to the effect of science on modern culture.

Dr. Salk's special area of research is auto-immunity, wherein the body's immune system attacks other body tissues as if

they were disease causing invaders. Genetics is being explored by Dr. Edwin Lennox, a former physicist who helped develop nuclear energy. Cancer research is being conducted by Dr. Renato Dulbecco, an Italian-born virologist who has won America's Lasker Award for work on cancer.

The origins of life on earth are the subject of Dr. Leslie Orgel's research. A chemist, Dr. Orgel was elected to England's prestigious Royal Society at the age of 35. Research on immunology, how the body fights disease, is being conducted by Dr. Melvin Cohn, a biochemist formerly with the Pasteur Institute. The meaning of this research and its ultimate effect on man is the subject of the studies of Dr. Jakob Bronowski, mathematician and humanist at the Institute.

In addition to the six resident fellows, the Salk Institute has six non-resident fellows, including two Nobel Prize winners.

The Salk Institute for Biological Studies began formation in 1962, though formal occupancy of its facilities at La Jolla did not occur until the summer of 1966. It is supported by the National Foundation, formerly the National Foundation for Infantile Paralysis, with added grants from the National Institutes of Health, the National Science Foundation, the American Cancer Society, and other similar organizations, foundations and private individuals.

"Jonas Salk—Science of Life" was written by Tom Shachtman. Fred Warshofsky is science editor for the series; Isaac Kleinerman, producer; and Burton Benjamin, executive producer. "The 21st Century" is produced by CBS.

February Retirees

Continued from Page 2
County. He came here October 11, 1943, after working with Brookside Mills, from 1917 until 1919 and in Knoxville until 1921. From 1921 until 1927 he was with the Andros Stone and Marble Company, and worked from 1927 until 1943 with the Tennessee Marble Co., Inc.

Mrs. Murphy is the former Katie L. Stipe, and they have two daughters, Betty Murphy, Hickson, Tennessee and Eleanor Murphy, Detroit.

They plan a trip to the West Coast, visiting friends and relatives in the Pasadena, San Francisco area this Spring. The trip will also include a visit to Disneyland.

Murphy says his almost 25 years spent in Y-12 have been wonderful years.

William F. Smith Sr., a native of Fayetteville, Tennessee, came here October 8, 1944.

Lives In Oak Ridge

He lives at 119 Quincy Avenue, Oak Ridge. Mrs. Smith is the former Rose Marie Dyer, and the couple has four daughters . . . Billie Rather, Oliver Springs; Sally Stockstill, Oak Ridge; Betsy Barber, Bethesda, Maryland; and Nola Gentry, Washington, D. C. Sons W. F. Smith Jr. lives in Atlanta and Robert R. Smith in Oak Ridge. Twin sons Ray and Jay are also at home.

Smith spent his early youth in the grocery business around Fayetteville, and farmed some also. In 1943 he was employed at Camp Forrest, Tennessee, but returned to the grocery business just before coming here more than 24 years ago.

He has no plans for retirement, but definitely will stay in Oak Ridge.

Y-12 extends its best wishes to all seven of its February retirees.

Swingsters New Classic Alley Tops

The Swingsters jumped into first place-standings in the Classic Bowling League after a sweeping four-point win over the Rebels. The Swingsters also swept team honors for the week, rolling singles of 975 scratch, 1094 handicap . . . series of 2708, 3065.

The rest of the wins were three pointers. The Markers marked past the Pinbusters, the Rippers ran by the Eightballs, the Has Beens overcame the Cubs, the Splinters downed the Eagles, the Tigers defeated the All Stars, the Smelters sailed by the Bumpers and the Screwballs edged by the Playboys.

Otis Rackley, Swingsters, rolled high singles . . . scratch of 226 and handicap of 246.

Walt Sherrod, Eagles, rolled a 608 scratch series . . . and Bob Hagood, Bumpers, and Wesley Brothers, Screwballs, both rolled a 663 handicap series.

League standings follow:

Team	W	L
Swingsters	23	13
Markers	22½	13½
Pinbusters	22	14
Rippers	21½	14½
Bumpers	21	15
Eagles	21	15
Eightballs	19	17
Has Beens	19	17
Rebels	18	18
All Stars	17½	18½
Playboys	16	20
Splinters	16	20
Tigers	15½	20½
Cubs	15	21
Smelters	11	25
Screwballs	10	26

SLOW CAREER

Judge: Seems to me you've been coming up before me in this court for the past 20 years.

Prisoner: Yeah, judge, and I'm disappointed in you. I thought by now you'd be governor.



UNION CARBIDE CORPORATION
NUCLEAR DIVISION
P. O. BOX Y, OAK RIDGE, TENNESSEE 37830

(RETURN POSTAGE GUARANTEED)

BULK RATE
U.S. Postage
PAID
Oak Ridge, Tenn.
Permit No. 71

120890

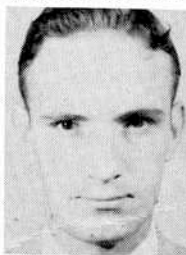


C. C. DINKINS, METAL PREPARATION DIVISION, designs a records system for the Rover Project which made keypunching the information from the production areas much simpler. Key-punch clerks state that even the handwriting improved on the data sheets!

Rover Computer Work

Continued from Page 1
accuracy achieved during these periods.

Operations Clerk Felix Ooten worked on the Project from its very inception.



Ooten

Rover data which provided reports at 8 a.m. each morning.

The use of a limited storage computer for the Project Rover has been considered a success in spite of the magnitude of the problems involved. The computer programs had to be developed and written with limited storage in mind, and often very little storage remained to handle the frequent requests for revision.

Miss Secrist has been in Y-12 since March, 1953. She holds a B.S. degree in accounting from the University of Tennessee. Presently she is vice president in charge of publicity of the Gateway to Knoxville Chapter of the Data Processing Management As-



As the winds of March usher in the third month, more Y-12ers observe 15 and 10-year birthdays with Union Carbide Corporation.

15 YEARS

Toy Moon, Assembly Operations, March 1.

Ernest E. Choat, Environmental Control Engineering, March 2.

Preston A. Cuthbertson Jr., Process Maintenance, March 2.

Richard E. Hulme, Engineering Division, March 2.

Kenneth G. Kincaid, General Machine Shop, March 2.

Loren M. Lawhorn, Safety Department, March 2.

Edmond Roberts, Process Maintenance, March 3.

Willard A. McFarland, Electrical Department, March 5.

10 YEARS

James C. England Jr., Engineering Mechanics, March 3.

William A. Sloan Jr., Civil and Architectural Engineering, March 3.

sociation. She served as president of the local chapter of DPMA, and has been its secretary-treasurer.